

09900700 "070604

GAATTCCGGGTGGGTAGGTTCGGGCAGGGTAGGACAGGCCCTAAGAGAGAGGGCCGGACAGACCTCC  
TTTGGAAGCAGCCACTTCTGGTCCCCATCCCTGGAGCGATCGAGCGCAGGATCTGCTGTCCCAT  
GGGACAGCAGATCTCTCTTCCCAGTGCACAGCTTCTCCTCTGCCTGTTTTCCCTGCTTCCAGTG  
CTCCAGGTGGCCCAACCAGGCCAGGCACCCAGGACCAGCCCCTGTGGACACTTTTGGAGCAGT  
ACTGCCACAGGACCACAATTGGGAATTTTTCAGGTCCCTACACCTACTGCAACACGACCTTGGA  
CCAGATCGGGACCTGCTGGCCACAGAGCGCACCCGGAGCCCTAGTAGAGAGACCGTGCCCCGAG  
TACTTCAATGGCATCAAGTACAACACGACCCGGAATGCCCTACAGAGAGTGCCTGGAGAACGGGA  
CCTGGGCCTCAAGGGTCAACTACTCACACTGCGAACCCTATTTTGGATGACAAGCAGAGAAAAGTA  
TGACCTGCATTACCGAATCGCCCTCATTTGTCAACTACCTGGGTCACTGTGTTTTCCGTGGTGGCC  
CTGGTGGCCGCTTTTCTGCTTTTTCCTAGTGCTGCGGAGTATCCGCTGCCTGAGGAATGTGATCC  
ACTGGAACCTCATCACACCTTCATTCTGAGAAACATCGCGTGGTTTCTGCTGCAACTCATCGA  
CCACGAAGTGCACGAGGGCAATGAGGTCTGGTGGCGCTGCATCACCAACCTCTTCAACTATTTT  
GTGGTCAACCAACTTCTTCTGGATGTTTTGTGGAGGGCTGCTACCTGCACACGGCCATTGTGATGA  
CGTACTCCACAGAGCACCTGCGCAAGTGGCTTTTTCCTCTTCATTGGATGGTGCATTCCCTGCCC  
TATCATCATCGCCTGGGCAGTTGGCAAACCTCTACTATGAGAATGAGCAGTGCTGGTTTTGGCAAG  
GAAGCTGGTGATTTGGTGGACTACATCTACCAGGGCCCCGTCATGCTTGTGCTGTTGATCAATT  
TTGTATTTCTGTTTAACATCGTCAGGATCCTGATGACGAAGTTACGAGCATCCACCACGTCCGA  
GACAATCCAATACAGGAAGGCAGTGAAGGCCACGCTGGTTCCTCCTCCCCCTGTTGGGCATCACC  
TACATGCTCTTCTTTGTCAATCCTGGCGAGGACGACCTGTCCCAGATTGTGTTTCATCTACTTCA  
ACTCTTTTCTGTCAGTCCTTCCAGGGTTTCTTTGTGTCCGTTTTCTACTGCTTCTTCAATGGAGA  
GGTGC GCGCGGCCCTGAGAAAGCGGTGGCACTCGGGGCAGGACCACCACGCCCTCCGGGTGCCT  
GTGCGCCGGGCCATGTCCATCCCTACGTCGCCCACCAGGATCAGCTTCCACAGCATCAAGCAGA  
CAGCTGCTGTGTGACCCTCTGTACCGTCTGCCCAGGAGTCCACCCTGAGGCAGCTTCTCCAT  
CCTTTACAGCCTTCCCCTGGGTCTCCTTGCTACCCTGACCCACAGGTACAAGGTACAGGAGAA  
GGGAGGAGAACGAACACTCCC (SEQ ID NO:1)

FIGURE 1

underlined = deleted in targeting construct

[ ] = sequence flanking Neo insert in targeting construct

GAATTCCGGGTGGGTAGGTGCGGCAGGGTAGGACAGGCCAAGAGAGAGGCCGGACAGAC  
CTCCTTTGGAAGCAGCCACTTCTGGTCCCCATCCCTGGAGCGATCGAGCGCAGGATCTGC  
TGTCCTATGGGACAGCAGATCTCTCTTCCAGTGCACAGCTTCTCCTCTGCCTGTTTTCC  
CTGCTTCCAGTGCTCCAGGTGGCCCCAACCAGGCCAGGCACCCCAGGACCAGCCCCCTGTGG  
ACACTTTTGGAGCAGTACTGCCACAGGACCACAATTGGGAATTTTTTCAGGTCCCTACACC  
TACTGCAACACGACCTTGGACCAGATCGGGACCTGCTGGCCACAGAGCGCACCCGGAGCC  
CTAGTAGAGAGACCGTGCCCCGAGTACTTCAATGGCATCAAGTACAACACGACCC [GGAA  
TGCCTACAGAGAGTGCCTGGA] GAACGGGACCTGGGCCTCAAGGGTCAACTACTCACACT  
GCGAACCCTATTTGGATGACAAGCAGAGAAAAGTATGACCTGCATTACCGAATCGCCCCCA  
TTGTCAACTACCTGGGTCACTGTGTTTTCCGTGGTGGCCCTGGTG [GCCGCTTTCCTGCTT  
TTCCTAGTGCTGCG] GAGTATCCGCTGCCTGAGGAATGTGATCCACTGGAACCTCATCAC  
CACCTTCATTCGAGAAACATCGCGTGGTTTCCTGCTGCAACTCATCGACCACGAAGTGCA  
CGAGGGCAATGAGGTCTGGTGCCGCTGCATCACCACCATCTTCAACTATTTTGTGGTCAC  
CAACTTCTTCTGGATGTTTTGTGGAGGGCTGCTACCTGCACACGGCCATTGTCATGACGTA  
CTCCACAGAGCACCTGCGCAAGTGGCTTTTCTCTTCATTGGATGGTGCATTCCCTGCCC  
TATCATCATCGCCTGGGCAGTTGGCAAACCTCTACTATGAGAATGAGCAGTGCTGGTTTGG  
CAAGGAAGCTGGTGATTTGGTGGACTACATCTACCAGGGCCCCGTCATGCTTGTGCTGTT  
GATCAATTTTGTATTTCTGTTTAACATCGTCAGGATCCTGATGACGAAGTTACGAGCATC  
CACCACGTCCGAGACAATCCAATACAGGAAGGCAGTGAAGGCCACGCTGGTCCTCCTCCC  
CCTGTTGGGCATCACCTACATGCTCTTCTTTGTCAATCCTGGCGAGGACGACCTGTCCCA  
GATTGTGTTTCATCTACTTCAACTCTTTCTGTCAGTCTTCCAGGGTTTCTTTGTGTCCGT  
TTTCTACTGCTTCTTCAATGGAGAGGTGCGCGCGGCCCTGAGAAAGCGGTGGCACTCGGG  
GCAGGACCACCACGCCCTCCGGGTGCCTGTGCGCCGGGCCATGTCCATCCCTACGTGCGC  
CACCAGGATCAGCTTCCACAGCATCAAGCAGACAGCTGCTGTGTGACCCTCTGTACCCGT  
CTGCCCCGCAGTCCACCACTGAGGCAGCTTCTCCATCCTTTACAGCCTTCCCCTGGGTCC  
TCCTTGCTACCTGACCCACAGGTACAAGGTACAGGAGAAGGGAGGAGAACGAACACTCC  
C

FIGURE 2A

# Gene Sequence Structure

\*

441 bp

Sequence Deleted

582 bp

Size of full-length  
cDNA: 1557 bp

## Targeting Vector\* (genomic sequence)

Construct Number: 3050

Arm Length:

5': 3.1 kb

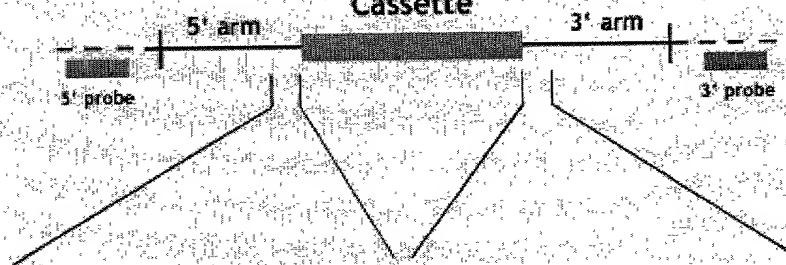
3': 2.5 kb

Targeting Vector  
Endogenous Locus

\* Not drawn to scale

## LacZ-Neo

### Cassette



5' >AGCCCTATGTGTAATTTTCAT  
ATAAATGACTCATATTAGCTTTCA  
GATATGCATTGTGTTTTTCAGGTCT  
GGGAGAACTAAGGAGTGTGGACCT  
TATCCTGCAGGTACTAGGGAGCCA  
GGGAGGGCTTTTGAGGCGGGAGGG  
CGTCCTGACTCTCAGTGGTTGGCA  
TCTTCTCTAGGGAATGCCTACAGA  
GAGTGCCTGGA<3'  
(SEQ ID NO:2)

5' >GCCGCTTTCCTGCTTTTCCTA  
GTGCTGCGGTGAGTCCACCTCCAC  
CCTGCTTCCTCCTTGTCTTTGCCT  
CTCCAGACATTGTCTCTTCCATT  
CTGGGGCCCCGGGAACAGTAGCCA  
GAAGTGGGTTTAAGTCAGACCCCC  
AGGGCCATGACCACCAGCCTGCCT  
GAAGGGTAGAGAGCAAGCCCAGCT  
GGGACCACCAG<3'  
(SEQ ID NO:3)

FIGURE 2B